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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,949	05/01/2002	Guy Couaraze	03715.0105	8770

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EXAMINER	
HOLT, ANDRIAE M	

ART UNIT	PAPER NUMBER
1616	

NOTIFICATION DATE	DELIVERY MODE
05/14/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/031,949	COUARAZE ET AL.	
	Examiner	Art Unit	
	Andriae M. Holt	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-6 and 8-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The new examiner of record for this application is Andriae M. Holt.

This Office Action is in response to the amendment filed on August 17, 2007. Claims 3-6 and 8-18 are pending in the application. Claims 3-6, and 8-16 have been amended. Claims 17-18 are newly added. Claims 1-2 and 7 from the previous action have been canceled.

Applicant's amendments and arguments filed August 18, 2007 are acknowledged and have been fully considered. Any rejection not specifically addressed below is herein withdrawn.

Response to Arguments

Applicant argues that the Makino reference does not teach the preparation of tablet formulations and that the Koyama reference does not provide the missing teaching, nor does the Koyama reference teach the compression granules claimed with less than 1% by weight of compression excipients. In response to Applicant's arguments, a new ground of rejection is being submitted to more clearly describe the examiner's position.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-6 and 8-17 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Koyama et al. (EP 0361874) in view of Maish (US 4,983, 399) in further view of Remington's Pharmaceutical Sciences 18th Edition (1990).

Applicant's Invention

Applicant claims a tablet comprising less than 40 mg/g of active principle attached as a coating to neutral microgranules comprising 62.5 to 91.5 % sucrose and the remainder starch. Applicant claims the tablet includes a compression excipient at less than 1% by weight of the tablet.

Determination of the scope of the content of the prior art
(MPEP 2141.01)

Koyama et al. teach the production of spherical granules having increased granule strength and rapid disintegration by use of a CF granulator. Koyama et al. teach the core granules used in the invention include spherical granules based on Nonpareil consisting of sucrose (75% weight %) coated with corn starch (25% weight percent), (24-32 mesh) (page 2, lines 52-53) (claims 17-18, neutral microgranules sucrose with the remainder starch, instant invention). It is known in the art that the particle size of Nonpareil seed cores is generally 14-80 mesh, i.e. 177-1410 μm (claims 3, 14, and 16, diameter of neutral microgranules, instant invention). Koyama et al. teach the granules are coated with a dispersion of L-HPC, the active ingredient and other additives other than L-HPC (page 3, lines 2-5) (claims 17-18, coating with active principle mixture and an optional binder, instant invention). Koyama et al. teach the active ingredient is not specifically limited, only if it can be administered in the form of granules (page 3, line 6). Koyama et al. further teach granulation is carried out, while nucleus granules are sprayed with a solution of L-HPC and the active ingredient and/or additives (page 3, lines 51-53). Koyama et al. teach the granulated material is dried and then sieved to give granules having core with a uniform particle size of 12 to 32 mesh (page 3, lines 55-58). Koyama et al. teach the granules may be mixed with other components to produce tablets (page 4, lines 5-6). Koyama et al. teach the granules may be coated to provide the flavor masking coating, enteric coating, gastric coating, or sustained-release coating (page 4, lines 1-3). Koyama et al. teach in example 2 the process of preparing the premix using 42 g of Nonpareil, the coating solution with the active ingredient, and

then adding and blending the lubricant and other ingredients to the mixture for compression into tablets (page 4, lines 54-58- page 5, lines 1-44) (claims 11-12, premix, instant invention). Koyama et al. teach on page 5, lines 35-43 an example where the blended mixture of microgranules is compressed into tablets at a compression of 1 ton/cm^2 (9.806 kN/cm2) (claims 13 and 16, process with compression force between 5 and 50 kN, instant invention), wherein the tablets have a disintegration time of 1.2 minutes (page 5, lines 40-56) (claim 6, disintegration time). Koyama et al. further teach that about 0.7 wt% magnesium stearate, a known lubricant, in the composition for tablet formation (page 5, lines 35-43) (claim 8, lubricant, instant invention).

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

Koyama et al. do not teach the lubricant is between 0.125 and .75 % by weight of the tablet. Koyama et al. do not teach the exact hardness and friability of claims 4 and 5. It is for this reason Maish and Remington's are joined.

Maish teaches direct compression carrier compositions that include a lubricant which may be any lubricant compound or composition commonly used in tableting compositions (col. 3, lines 3-5). Maish teaches the amount of the lubricant present in the direct compression carrier compositions may be varied substantially depending on the particular lubricant, the presence of other ingredients in the composition, the physiologically-active compound (medicament), and the amount thereof for which the carrier composition is designed and that the typical the amount of lubricant present is in the range of about .25 to 5.0 weight percent based on the total weight of the

compositions (col. 3, lines 48-52) (claims 15 and 17-18, excipient less than 1%, lubricant, 0.25 %, instant invention).

Remington's teaches that in addition to the active or therapeutic ingredient, tablets contain a number of inert material, known as additives or excipients. Remington's further teaches the first group contains those which help to impart satisfactory processing and compression characteristics to the formulation and that these include lubricants (page 1636, col. 1, Tablet Ingredients). Remington's teaches the second group includes substances that help to give additional desirable physical characteristics to the finished tablet, including disintegrants, colors, and in the case of controlled-release tablets, polymers or waxes or other solubility-retarding materials (claim 18, film coating, instant invention). Remington's teaches that lubricant's have a number of functions in tablet manufacture. Remington's teaches they prevent adhesion of the tablet material to the surface of the dies and punches, reduce interparticle friction, facilitate the ejection of the tablets from the die cavity and may improve the rate of flow of the tablet granulation (page 1636, col. 2, Lubricants, paragraph 1). Remington's teaches most lubricant's, with the exception of talc, are used in concentrations less than 1%. Remington's further teaches the quantity of lubricant varies, being as low as 0.1% and in some cases as high as 5% (page 1636, Lubricants, paragraph 5) (claim 9, 0.125 and .75%, instant invention).

Finding of prima facie obviousness
Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Koyama et al., Maish and Remington's Pharmaceutical Science to produce to a tablet formulation with an excipient/lubricant at less than 1%. Koyama et al. teach it is within the skill of one skilled in the art to produce tablets comprised of microgranules of Nonpareil with a particle size of 24-32 coated with an active ingredient and a binder, L-HPC that have enhanced strength and rapid disintegrating properties. Koyama et al. teach that a lubricant of .7% can be used in the formulation of the tablets. Maish teaches that the amount of the lubricant present in the direct compression carrier compositions may be varied substantially depending on the particular lubricant, the presence of other ingredients in the composition, the physiologically-active compound (medicament) and the amount thereof for which the carrier composition is designed and that the typical the amount of lubricant present is in the range of about .25 to 5.0 weight percent based on the total weight of the compositions. In addition, Remington's teaches that lubricants prevent adhesion of the tablet material to the surface of the dies and punches, reduce interparticle friction, facilitate, and may improve the rate of flow of the tablet granulation and that the quantity off lubricant varies. Remington's also teaches it is within the skill of the art to add film coating to tablets to add color and control the release of tablets. In reference to claims 4 and 5, the hardness and friability of the tablets would be inherent properties based on the formulations.

One skilled in the art at the time of invention would have been motivated to use an excipient in the form of a lubricant that is less than 1% in the formulation of the tablet as taught by Koyama et al. The adjustment of particular conventional working conditions is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan. It is known from the prior art that the amount of lubricant present varies depending on the presence of other ingredients in the compositions, particularly the active ingredients, therefore, the skilled artisan will use the best formulation possible based on the active ingredient to optimize results.

Given the state of the art as evidenced by the teachings of the cited references, and absent any evidence to the contrary, there would have been a reasonable expectation of success in combining the teachings of the cited references to formulate a tablet comprised of neutral microgranules made essentially of 62.5 % to 91.5 % sucrose and the remainder starch, coated with an active ingredient, a compression excipient at less than 1% by weight and that can be film coated that has increased tablet strength and rapid disintegration.

None of the claims are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andriae M. Holt whose telephone number is (571)272-9328. The examiner can normally be reached on 7:00 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richter Johann can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andriae M. Holt
Patent Examiner
Art Unit 1616

/Johann R. Richter/
Supervisory Patent Examiner, Art Unit 1616